

SEQUENCE

<110> Hexima Limited
Poon, Simon
Heath, Robyn L.
Clarke, Adrienne E.

<120> Arabinogalactan Protein Compositions and Methods for Fostering Somatic Embryogenic Competence

<130> 123-03 WO

<140> Not assigned
<141> 2005-03-31

<150> US 60/558,609
<151> 2004-03-31

<160> 27

<170> PatentIn version 3.2

<210> 1
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<212> PRT
<213> Artificial sequence

<220>
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<222> (5)...(6)
<223> X is any amino acid.

<220>
<221> misc_feature
<222> (5)...(6)
<223> Xaa can be any naturally occurring amino acid

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Glu Asp Tyr Ser Xaa Xaa Thr Ser Asn Pro Ile Ala Glu Tyr Lys
1 5 10 15

<210> 2
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<400> 2

Ile Gln Ile Gly Asp Ser Leu Val
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Ser Thr Ala Ser Leu Gly Val Thr Leu Ser Val
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Ala Gly Thr Leu Arg Pro Glu Lys Pro Phe Thr Ala Asn
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Asp Gly Trp Val Val Ser Pro Ser Glu Asn Tyr Asn His Trp Ala Glu
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Ile Gln Val Xaa Asp Glu Val Xaa Glu
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Tyr Ala Gly Asp Thr Ile Thr Gly Asn Thr Asp Asn Ser
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<221> variation

<222> (1)...(16)

<223> Y is C or T; I is inosine; R is A or G.

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<222> (1)...(20)

<223> Y is C or T; I is inosine; R is A or G; N is inosine.

<220>

<221> misc_feature

<222> (6)...(6)

<223> n is a, c, g, or t

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<222> (9)...(9)

<223> n is a, c, g, or t

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<222> (12)...(12)

<223> n is a, c, g, or t

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aayccnatng cngartayaa

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<222> (18)..(18)
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<400> 9
aaytayaayc attgggcnga

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<222> (3)..(3)
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ccncaraarc cnttyacngc naa

23

<210> 11

<211> 84
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<223> GhPRP1 partial nucleotide sequence.

<400> 11
ccccagaagc catttactgc gaacaagctt ccgtttattc tctacaccgt tgggccattt 60
gctttcgAAC ccaaATGCTA CTAG 84

<210> 12
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<223> GhPRP1 partial amino acid sequence.

<400> 12

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| Pro | Glu | Lys | Pro | Phe | Thr | Ala | Asn | Lys | Leu | Pro | Phe | Ile | Leu | Tyr | Thr |
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Val Gly Pro Phe Ala Phe Glu Pro Lys Cys Tyr
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<212> DNA
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<220>
<223> Synthetic primer

<400> 13
gctatttcta tagcaactca ac 22

<210> 14
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caaactcaaa acaaccccaa aacc 24

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<223> Synthetic primer

<400> 15
gatgaaagca aggcacacac ac

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<210> 16
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<400> 16
cccccataata attcagcacc

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<210> 17
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agctttgcac aaggtaaaga aatcatggtt ggtggcaaaa caggcgcttg gaagataacct 120
tcttctgaat cagattctct caacaaatgg gctgaaaaag ctcgtttcca aatcggcgac 180
tctctcgtgt gcaaatatga tggtgtaaa gactcggtgc tccaaatgtg taaggaggat 240
tataacaatgtt gcaatacgtc gaacccgatt gccgagtaca aagatggaa caccaaggtg 300
aagcttgaaa agtcaggacc atatttttc atgagtggag caaaggccca ctgcgagcaa 360
ggccagaaga tgattgtggt tgtgatgtct caaaagcata ggtacattgg aatctctcca 420
gcaccttcgc cggttgattt tgaaggtccg gccgttgctc caacaagcgg agttgcaggg 480
ttgaaggctg gtttgggtt gacagtgggg gtttgggt tggatgttga 528

<210> 18
<211> 175
<212> PRT
<213> Cotton

<400> 18

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ala | Ala | Lys | Ala | Phe | Ser | Arg | Ser | Ile | Thr | Pro | Leu | Val | Leu | Leu |
| 1 | | | | | | | | | | | | | | | |
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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Ile | Phe | Leu | Ser | Phe | Ala | Gln | Gly | Lys | Glu | Ile | Met | Val | Gly | Gly |
| 20 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Thr | Gly | Ala | Trp | Lys | Ile | Pro | Ser | Ser | Glu | Ser | Asp | Ser | Leu | Asn |
| 35 | | | | | | | | | | | | | | | |
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Lys Trp Ala Glu Lys Ala Arg Phe Gln Ile Gly Asp Ser Leu Val Trp
 50 55 60

Lys Tyr Asp Gly Gly Lys Asp Ser Val Leu Gln Val Ser Lys Glu Asp
 65 70 75 80

Tyr Thr Ser Cys Asn Thr Ser Asn Pro Ile Ala Glu Tyr Lys Asp Gly
 85 90 95

Asn Thr Lys Val Lys Leu Glu Lys Ser Gly Pro Tyr Phe Phe Met Ser
 100 105 110

Gly Ala Lys Gly His Cys Glu Gln Gly Gln Lys Met Ile Val Val Val
 115 120 125

Met Ser Gln Lys His Arg Tyr Ile Gly Ile Ser Pro Ala Pro Ser Pro
 130 135 140

Val Asp Phe Glu Gly Pro Ala Val Ala Pro Thr Ser Gly Val Ala Gly
 145 150 155 160

Leu Lys Ala Gly Leu Leu Val Thr Val Gly Val Leu Gly Leu Phe
 165 170 175

<210> 19
<211> 660
<212> DNA
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| | |
|--|-----|
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| tcatcacagg gttataagtt ctatgttggt ggttagagacg gttgggttgt tagtccttct | 120 |
| gagaactaca atcattgggc tcaaaggaaat agattccaag tcaatgatac tcttttttc | 180 |
| aagtacaaga aagggtcaga ctcggtgctg ttggtaacaa gagaagattt ctttcatgc | 240 |
| aacaccaaga acccaattca gtcttaaca gaaggtgatt cactcttac atttgatcgg | 300 |
| tcgggtccct tcttttcat caccggtaac gctgataatt gaaaaaagg gcaaaagctg | 360 |
| atcgctgtgg tcatggctgt aagacacaaa ccccagcaac aacctccccc accttctccc | 420 |
| tcatctgctg tgacaacacgc gccggttct ccacccacat tacccattcc tggaaactaac | 480 |
| cctcctgttag agtcaccaaa gagcagttag gctccatctc atgatgctgt ggaaccagct | 540 |
| ccgccccggc acagatcggg ttcattcaaa ctagtatgtt ctacctggct ggtgttgggt | 600 |
| ttcggcattt gggtcagcat ggccttgggg atcgaaaatg tagttgttt ttgggtgctga | 660 |

<210> 20
<211> 219
<212> PRT
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<400> 20

Met Gly Phe Glu Arg Tyr Leu Ala Ser Val Leu Ile Val Ile Met Leu
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Ser Phe Ile Thr Ser Ser Gln Gly Tyr Lys Phe Tyr Val Gly Gly Arg
20 25 30

Asp Gly Trp Val Val Ser Pro Ser Glu Asn Tyr Asn His Trp Ala Glu
35 40 45

Arg Asn Arg Phe Gln Val Asn Asp Thr Leu Phe Phe Lys Tyr Lys Lys
50 55 60

Gly Ser Asp Ser Val Leu Leu Val Thr Arg Glu Asp Tyr Phe Ser Cys
65 70 75 80

Asn Thr Lys Asn Pro Ile Gln Ser Leu Thr Glu Gly Asp Ser Leu Phe
85 90 95

Thr Phe Asp Arg Ser Gly Pro Phe Phe Phe Ile Thr Gly Asn Ala Asp
100 105 110

Asn Cys Lys Lys Gly Gln Lys Leu Ile Val Val Val Met Ala Val Arg
115 120 125

His Lys Pro Gln Gln Gln Pro Pro Ser Pro Ser Pro Ser Ala Val
130 135 140

Thr Thr Ala Pro Val Ser Pro Pro Thr Leu Pro Ile Pro Glu Thr Asn
145 150 155 160

Pro Pro Val Glu Ser Pro Lys Ser Ser Glu Ala Pro Ser His Asp Ala
165 170 175

Val Glu Pro Ala Pro Pro Glu His Arg Ser Gly Ser Phe Lys Leu Val
180 185 190

Cys Ser Thr Trp Leu Val Leu Gly Phe Gly Ile Trp Val Ser Met Ala
195 200 205

Leu Gly Ile Glu Asn Val Val Cys Phe Trp Cys
210 215

<210> 21
<211> 48
<212> DNA
<213> Artificial sequence

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<223> Synthetic primer

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<210> 22
<211> 31
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic primer

<400> 22
ctagattcca atgtacctat gcttttggaga c 31

<210> 23
<211> 45
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic primer

<400> 23
caccctgggtt ccgcgtggat cctataagtt ctatgggtt ggttag 45

<210> 24
<211> 34
<212> DNA
<213> Artificial sequence

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<223> Synthetic primer

<400> 24
ctatttgtgc tggggtttgt gtcttacagc catg 34

<210> 25
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<223> Recombinant PLL sequence.

<400> 25

Met Ser Tyr Tyr His His His His His His Leu Glu Ser Thr Ser Leu
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Tyr Lys Lys Ala Gly Ser Ala Ala Ala Pro Phe Thr Leu Val Pro Arg
20 25 30

Gly Ser Lys Glu Ile Met Val Gly Gly Lys Thr Gly Ala Trp Lys Ile
35 40 45

Pro Ser Ser Glu Ser Asp Ser Leu Asn Lys Trp Ala Glu Lys Ala Arg
50 55 60

Phe Gln Ile Gly Asp Ser Leu Val Trp Lys Tyr Asp Gly Gly Lys Asp
65 70 75 80

Ser Val Leu Gln Val Ser Lys Glu Asp Tyr Thr Ser Cys Asn Thr Ser
85 90 95

Asn Pro Ile Ala Glu Tyr Lys Asp Gly Asn Thr Lys Val Lys Leu Glu
100 105 110

Lys Ser Gly Pro Tyr Phe Phe Met Ser Gly Ala Lys Gly His Cys Glu
115 120 125

Gln Gly Arg Lys Met Ile Val Val Val Met Ser Gln Lys His Arg Tyr
130 135 140

Ile Gly Ile
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Met Ser Tyr Tyr His His His His His His Leu Glu Ser Thr Ser Leu
1 5 10 15

Tyr Lys Lys Ala Gly Ser Ala Ala Ala Pro Phe Thr Leu Val Pro Arg
20 25 30

Gly Ser Tyr Lys Phe Tyr Val Gly Gly Arg Asp Gly Trp Val Val Ser
35 40 45

Pro Ser Glu Asn Tyr Asn His Trp Ala Glu Arg Asn Arg Phe Gln Val
50 55 60

Asn Asp Thr Leu Phe Phe Lys Tyr Lys Lys Gly Ser Asp Ser Val Leu
65 70 75 80

Leu Val Thr Arg Glu Asp Tyr Phe Ser Cys Asn Thr Lys Asn Pro Ile
85 90 95

Gln Ser Leu Thr Glu Gly Asp Ser Leu Phe Thr Phe Asp Arg Ser Gly
100 105 110

Pro Phe Phe Phe Ile Thr Gly Asn Ala Asp Asn Cys Lys Lys Gly Gln
115 120 125

Lys Leu Ile Val Val Val Met Ala Val Arg His Lys Pro Gln Gln Gln
130 135 140

<210> 27

<211> 15

<212> PRT

<213> Artificial sequence

<220>

<223> Synthetic peptide

<400> 27

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